Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Protocol summary

Study aim
To compare Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility.

Design
Pragmatic, Parallel group, Double blind, Randomized controlled trial (RCT),

Settings and conduct
Saba Physical Therapy, Rehabilitation and sports injury clinic Lahore. Participants and outcome assessor will be blinded by the researcher.

Participants/Inclusion and exclusion criteria
INCLUSION CRITERIA Pain and functional limitations of shoulder joint in 20-60 years old patients. Limited mobility/Hypo mobility of shoulder joint in Flexion, extension, abduction, Horizontal adduction, external and internal rotation. Unremarkable medical history and no clinical or radiological findings that could explain the decrease in shoulder motion Willing to involve in study EXCLUSION CRITERIA Upper or lower motor neuron disease Any pathological and traumatic conditions, Fractures and Dislocation Already received few sessions of Manual Therapy treatment Taking corticosteroids, analgesic or anti-inflammatory drugs.

Intervention groups
Group A: Subjects in Group A will received METs (Post isometric relaxation) towards the limited ROM of arm, find the first resistive barrier hold the position and apply the technique and find new barrier. Repeat this for 6-10 times and give three treatment sessions per week for two weeks. Group B: Subjects of group B will receive the techniques of Fascial distortion model according to the body language of the patient(Trigger bands, Continuum Distortion, cylinder Distortion,13 Herniated Trigger Point, Folding Distortions and Tectonic Fixation) in comfortable position for patient. Give three treatment sessions per week for two weeks.

Main outcome variables
Range of Motion, Pain, Function

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200512047408N1**
Registration date: **2020-05-31, 1399/03/11**
Registration timing: **prospective**

Last update: **2020-05-31, 1399/03/11**
Update count: **0**

Registration date
2020-05-31, 1399/03/11

Registrant information

Name
Usman Ghani

Name of organization / entity
Riphah International University, Islamabad, Pakistan

Country
Pakistan

Phone
+92 40 4301029

Email address
usmanghani270@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-06-01, 1399/03/12

Expected recruitment end date
2020-07-01, 1399/04/11

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Public title
Comparison of Muscle Energy Technique and Fascial Distortion Model in patients with shoulder joint limited mobility

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Pain and functional limitations of shoulder joint in 20-60 years oldpatients. Limited mobility/Hypo mobility of shoulder joint in Flexion, extension,abduction, Horizontal adduction, external and internal rotation. Unremarkable medical history and no clinical or radiological findings thatcould explain the decrease in shoulder motion Willing to involve in study

Exclusion criteria:
Upper or lower motor neuron disease. Any pathological and traumatic conditions, Fractures and Dislocation. Already received few sessions of Manual Therapy treatment. Taking corticosteroids, analgesic or anti-inflammatory drugs.

Age
From **20 years** old to **60 years** old

Gender
Both

Phase
2

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size
Target sample size: **44**

Randomization (investigator's opinion)
Randomized

Randomization description
Total forty 44 patients will be recruited in the study. The subjects will be randomly assigned to two groups A & B with each containing 22 subjects according to their selection by lottery method. There will be 44 slips marking with A on 22 slips & B on other 22 slips in the box. Each participant will be requested to randomly pick up a slip from the box. Slips which are picked by the patients will not put back in the box.

Blinding (investigator's opinion)
Double blinded

Blinding description
Participants allocated in each group will unaware about each other that which participant receives which treatment protocol. outcome assessor and data analyser will be blind about participants and treatment protocols.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Riphah International University, Islamabad

Street address
63B, B block BOR society Johar Town

City
Lahore

Postal code
54782

Approval date
2020-01-01, 1398/10/11

Ethics committee reference number
REC/RCRS/20/1006

Health conditions studied

1

Description of health condition studied
Shoulder joint limited mobility

ICD-10 code
M25.81

ICD-10 code description
Other specified joint disorders, shoulder

Primary outcomes

1

Description
Range of Motion

Timepoint
Before intervention and 1, 2, 6 weeks after intervention

Method of measurement
Goniometer

2

Description
Pain

Timepoint
Before intervention and 1, 2, 6 weeks after intervention

Method of measurement
Visual Analogue Scale

3

Description
Function

Timepoint
Before intervention and 1, 2, 6 weeks after intervention

Method of measurement
Constant Murley Score

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Muscle Energy Technique(Post isometric relaxation)
Category
Rehabilitation

2

Description
Intervention group: Fascial distortion model
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Saba's Physical Therapy, Rehabilitation and sports injury clinic.
Full name of responsible person
Dr Saba Rafiq
Street address
25/H Firdous Market, Gulberg III, Lahore, Pakistan
City
Lahore
Postal code
54660
Phone
+92 42 35883608
Email
saba_gull837@yahoo.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Riphah international university, Islamabad, Pakistan
Full name of responsible person
Usman Ghani
Street address
63b, B block, BOR society, Johar town, Lahore
City
Lahore
Postal code
54782
Phone
+92 40 4301029
Email
usmanghani270@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Self funding
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Foreign
Category of foreign source of funding
Sponsor: country of origin
Country of origin
PK
Type of organization providing the funding
Other

Person responsible for general inquiries

Contact
Name of organization / entity
Riphah international university, islamabad, Pakistan
Full name of responsible person
Usman Ghani
Position
Student
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
63b, B block, BOR Society, Johar town Lahore, Pakistan
City
Lahore
Province
Punjab
Postal code
54782
Phone
+92 40 4301029
Email
usmanghani270@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Riphah international university, Islamabad, Pakistan
Full name of responsible person
Usman Ghani
Position
Student
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
63b, BOR society, Johar Town, Lahore, Pakistan

City
Lahore
Province
Punjab
Postal code
54782
Phone
+92 40 4301029
Email
usmanghani270@gmail.com

Person responsible for updating data

Contact
Name of organization / entity
Riphah international university, Islamabad, Pakistan
Full name of responsible person
Usman Ghani
Position
Student
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
63b, B block, BOR society, Johar Town, Lahore
City
Lahore
Province
Punjab
Postal code
54782
Phone
+92 40 4301029
Email
usmanghani270@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
There is no further information
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available